

REMARKS

The specification has been amended to correct a typographical error in which Lmax for Example 2 in Table 1 was inadvertently indicated as "3800" instead of "38000". Support for the correct can be found in Table 1 of the priority document submitted on February 4, 2002, which clearly sets forth "38000". In this regard, it is noted that the disclosure of the priority document was incorporated by reference into the present application in the last paragraph on page 25 of the present application. Also, this correction is discussed in the Rule 132 Declaration submitted herewith.

Entry of the above amendment is respectfully requested.

Obviousness Rejections

On page 2 of the Office Action, in paragraph 5, claims 29, 33-35, 40, 44 and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forrest et al. (US 6,310,360 B 1), in view of Egusa et al. (US 5,294,810) and either one of Igarashi et al. (US 2001/0019782 A1) or Thompson et al. (US 2002/0034656 A1). Also, on page 6 of the Office Action, in paragraph 6, claims 29, 33-35, 40, 44 and 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldo et al. in Appl. Phys. Lett. 75(1), pp. 4-6 (July 5, 1999), in view of Egusa et al. (US 5,294,810) and either one of Igarashi et al. (US 2001/0019782 A1) or Thompson et al. (US 2002/0034656 A1).

In particular, the Examiner indicates on page 10 of the Office Action that with respect to the Rule 132 Declaration, it is the Examiner's position that the data set forth in the Declaration do not demonstrate unexpectedly superior results commensurate in scope with the claims.

With respect to Examples 1, 2, 3 and 4, and Comparative Examples 1 and 2, the Examiner notes that there are two discrepancies between the data for these examples as set forth in Table 2 in the Declaration and the corresponding data in the specification.

First, based on the specification, Comparative Example 2 utilizes a fluorescent red light-emitting material as well as a fluorescent green light-emitting material whereas Table 2 in the Declaration lists the red light-emitting material as phosphorescent.

Second, $L_{\max}(\text{Cd}/\text{m}^2)$ for Example 2 is disclosed as 3800 in the specification (Table 1, page 24) whereas Table 2 in the Declaration lists the value as 38000.

Even if the $L_{\max}(\text{Cd}/\text{m}^2)$ for Example 2 is correct as listed in Table 2 of the Declaration (rather than the much lower value disclosed in the specification), it is the Examiner's position that the data would only appear to support an argument that using bis(2-phenylquinoline) acetylacetonato iridium complex in combination with tris(2-phenylpyridine)iridium complex provides unexpectedly superior results compared to the use of either of these two iridium complexes without the other. (If the $L_{\max}(\text{Cd}/\text{m}^2)$ for Example 2 is correct as listed in the specification, then the data do not support such an argument.) However, the Examiner indicates that none of the pending claims require these two specific iridium complexes.

Applicant respectfully submits that the present invention is not obvious over the cited art, and requests that the Examiner reconsider and withdraw the rejections in view of the following remarks and the Rule 132 Declaration submitted herewith. In particular, Applicants have the following comments on the issues raised by the Examiner.

1. Comments on discrepancies noted by the Examiner in the Office Action

(1) First, based on the specification, Comparative Example 2 utilizes a fluorescent red light-emitting material as well as a fluorescent green light-emitting material, whereas Table 2 in the Declaration filed July 28, 2008 lists the red light-emitting material as phosphorescent.

As indicated in the Rule 132 Declaration submitted herewith, the specification is correct, while Table 2 in the Declaration filed July 28, 2008 is incorrect. In the response to the previous Office Action, "Example 2" was corrected to "Example 3" on page 23, line 21 of the specification to correct a clerical error in Comparative Example 2. Comparative Example 2 is really based on Example 3, and the red light-emitting material used in Comparative Example 2 is the same as in Example 3, i.e., rubrene (a fluorescent material). The expression "Phosphorescent" for the red light-emitting material in Table 2 in the Declaration filed July 28, 2008 was a clerical error and should have been "Fluorescent".

(2) Second, L_{max} for Example 2 is disclosed as 3800 in the specification, whereas Table 2 in the Declaration filed July 18, 2008 lists the value as 38000.

The value "38000" in the Declaration and also in the basic Japanese specification is correct (see Table 1 of the priority document submitted on February 4, 2002, which clearly includes "38000"), and the value in the Table 1 of the present specification is a clerical error.

2. Comments on the unexpected superiority of the present invention

It is the Examiner's position that the data set forth in the Declaration filed July 28, 2008 do not demonstrate unexpectedly superior results commensurate in scope with the claims. Thus, in order to demonstrate the unexpected superiority of the present invention, additional

experimentation was conducted as set forth in the Rule 132 Declaration submitted herewith and discussed below.

Additional Examples 1 to 9:

Devices were prepared and evaluated by repeating Example 2 of the present specification except for changing the green light-emitting material, tris(2-phenylpyridine)iridium complex (G-1), and the red light-emitting material, bis(2-phenylquinoline)acetylacetonatoiridium complex (R-2), to those shown for Additional Examples 1 to 9, respectively, in Table 2 in the Declaration (the compounds are illustrated in the attachment following Table 2 in the Declaration).

Additional Examples 10 to 16:

Devices were prepared and evaluated by repeating Example 4 of the present specification except for changing the green light-emitting material, tris(2-phenylpyridine)iridium complex (G-1), and the red light-emitting material, bis(2-phenylquinoline)acetylacetonatoiridium complex (R-2), to those shown for Additional Examples 10 to 16, respectively, in Table 2 in the Declaration (the compounds are illustrated in the attachment following Table 2 in the Declaration).

As can be seen from the results presented in Table 2 in the Declaration, the present invention, with its orthometallated complex requirements as recited in the present claims, provides a very high maximum luminance L_{max} and a very high light-emitting efficiency P at a low driving voltage V_{max} for a device which contains a blue light-emitting material, a green light-emitting material, and a red light-emitting material as compared to a device which contains

a blue light-emitting material, a green light-emitting material, and a red light-emitting material but does not satisfy the orthometallated complex requirements as recited in the present claims.

Thus, the Declarant concludes that the present invention provides unexpectedly superior results.

Accordingly, Applicant submits that the present invention is not obvious over the cited art, and withdrawal of these rejections is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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